

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

**SECURITIES AND EXCHANGE  
COMMISSION**

**Plaintiff,**

**v.**

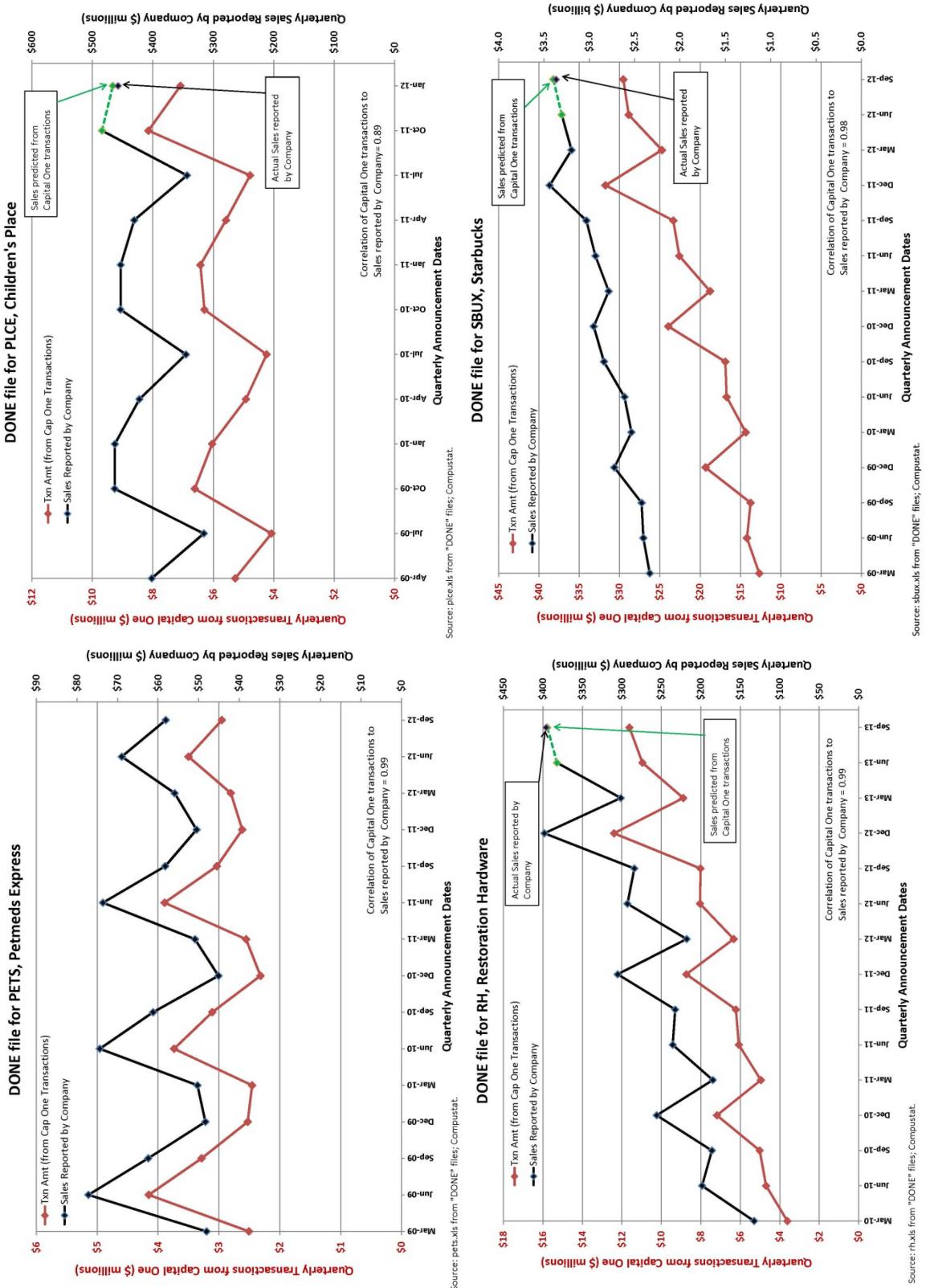
**BONAN HUANG, et al.**

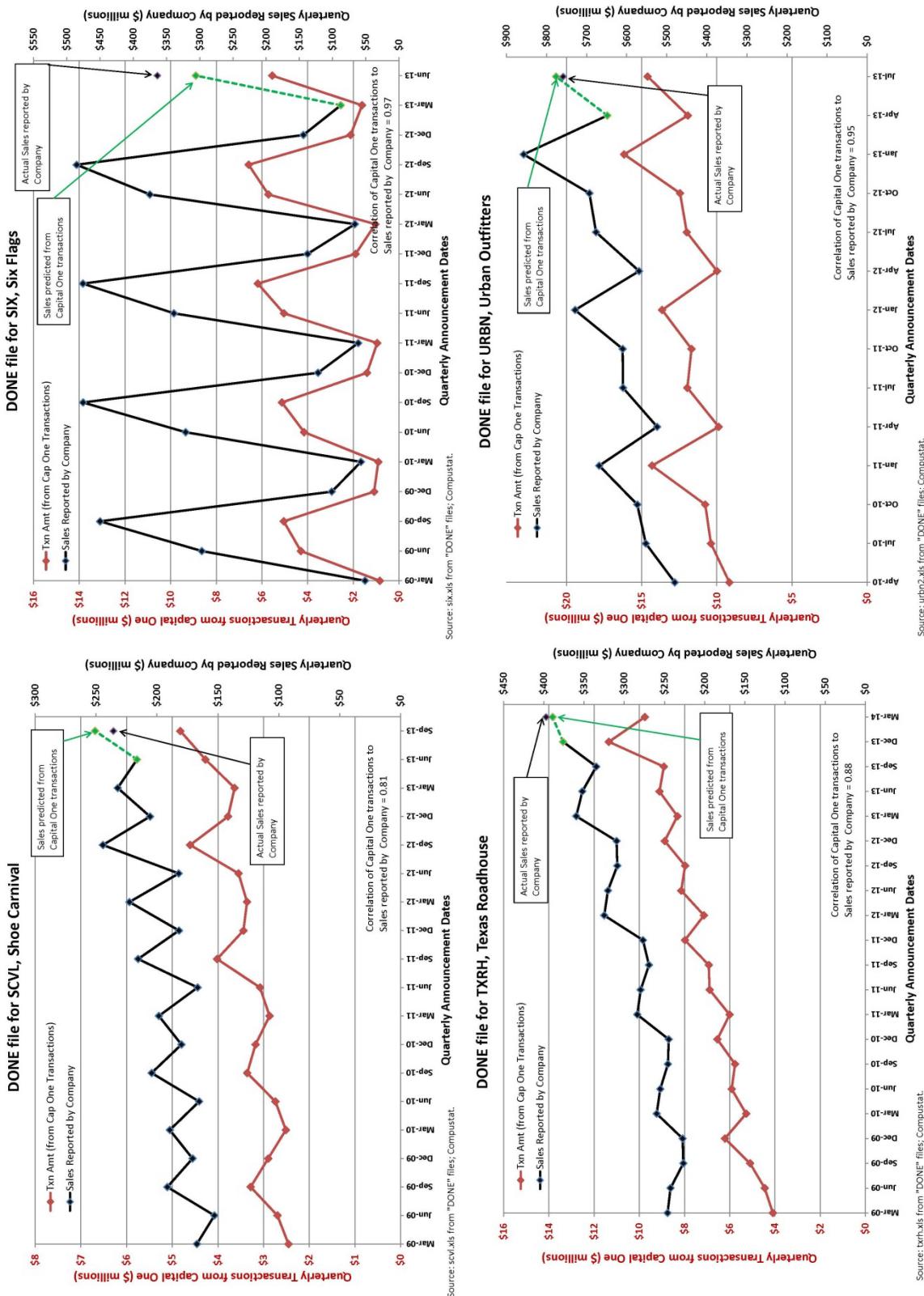
**Defendants.**

**Case No. 2:15-cv-00269-MAK**

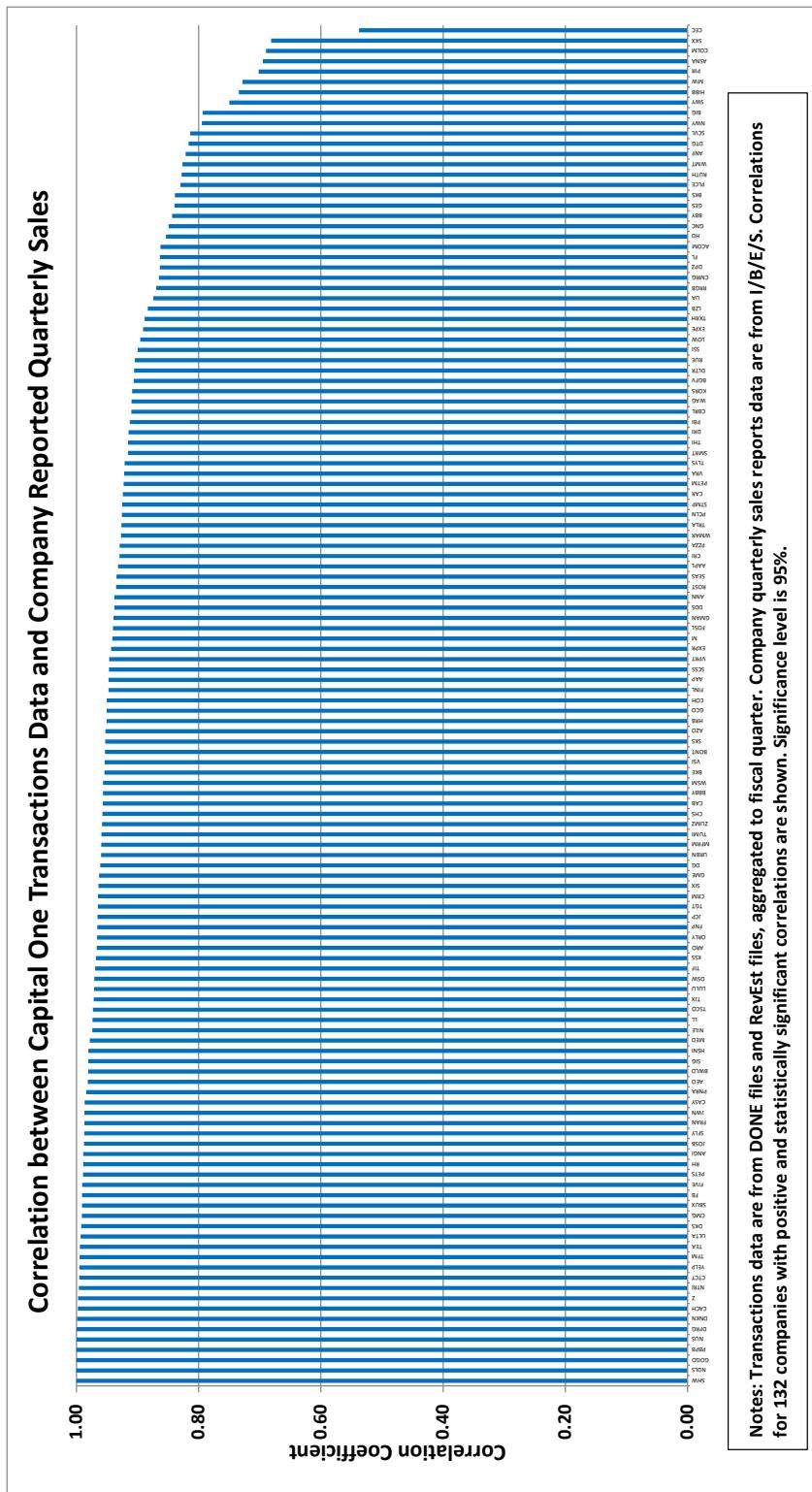
**PLAINTIFF SECURITIES AND EXCHANGE COMMISSION'S  
APPENDIX TO MOTION FOR SUMMARY JUDGMENT AGAINST  
DEFENDANTS BONAN HUANG AND NAN HUANG**

**PART 3 OF 10  
(0146-0196)**





## Exhibit F: Correlations between Transaction Data and Company Reported Sales

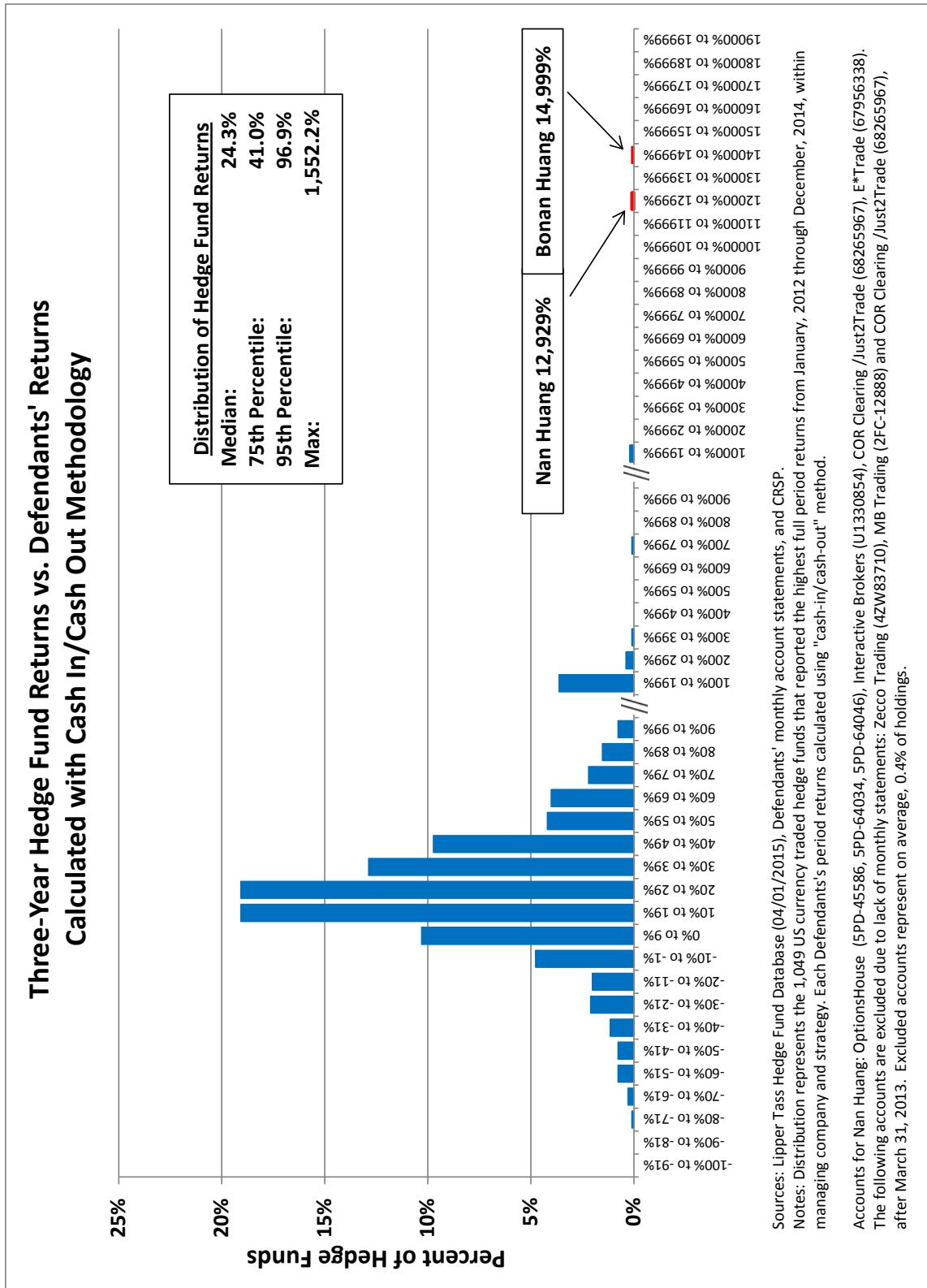


## Exhibit G: Returns on Market, Retail Consumer Industry & Hedge Funds

<b>Rates of Return for Various Market Measures</b>				
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2012-2014</b>
<b>S&amp;P 500</b>	<b>13.41%</b>	<b>29.60%</b>	<b>11.39%</b>	<b>63.72%</b>
<b>XLY ETF</b>	<b>23.60%</b>	<b>42.74%</b>	<b>9.46%</b>	<b>93.12%</b>
<b>Hedge Funds</b>	<b>9.39%</b>	<b>13.99%</b>	<b>4.50%</b>	<b>32.18%</b>

Notes: Hedge fund returns calculated from 1,049 hedge funds. These hedge funds represent the top performing US currency hedge funds for the 2012 - 2014 three year period for each fund manager and strategy combination. XLY ETF is a SPDR Fund tracking the Consumer Discretionary Select Sector Index.

## Exhibit H: Defendants' Rates of Returns Compared to Hedge Funds



**Exhibit 2: Rebuttal Report of Stephen Graham**

**Rebuttal Report**

**of**

**Stephen Graham**

**Securities and Exchange Commission, Plaintiff**

**v.**

**Bonan Huang and Nan Huang, Defendants**

**Case No. 2:15-cv-00269-MAK (E.D. Pa.)**

**October 16, 2015**

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## **I. Qualifications**

1. I am a Financial Economist in the Office of Litigation Economics in the Division of Economic and Risk Analysis at the U.S. Securities and Exchange Commission. My professional qualifications are described in my previous report in this matter dated September 18, 2015. I have not been specially compensated for the preparation of this report nor is my annual salary in any way dependent on the outcome of this case.

## **II. Scope**

2. I have been asked by counsel to review and respond to the Expert Rebuttal Report of Dr. Torben Voetmann (“Voetmann Report”), dated October 9, 2015.

## **III. Summary of Opinions**

3. **Contrary to Dr. Voetmann’s assertions, advance information about company revenue disclosures is important and relevant for investors.** Bonan Huang and Nan Huang (“Defendants”) accessed and analyzed transactions data from Capital One that allowed them to predict companies’ not-yet-reported quarterly revenue information. Dr. Voetmann argues that earnings are more important than company revenue information to investors, but he misses the relevant question: would an investor want to have information about company revenues in advance of the company’s release of its financial performance information? Based on strong support from analyst reports, news headlines, and company press releases, I conclude that investors consider this information to be important and relevant.

4. **Dr. Voetmann has not identified any flaws that undermine my conclusion that Capital One's transactions data are predictive of company revenue and company revenue surprises.** Dr. Voetmann makes two claims. First, he argues that I have addressed an irrelevant question because I analyze the relationship between Capital One transaction data and total company revenue rather than abnormal returns. However, rather than being irrelevant, my analysis, using both correlation and a statistical regression, shows that Capital One transaction data can be used to predict the company's not-yet-reported total quarterly revenue. His second claim is that my analysis rests on the assumption that Capital One transactions data "causes" a specific company's total company revenue. But my analysis neither assumes nor establishes causation. Instead, it shows that Capital One data provided Defendants with a strong statistical basis for forecasting not-yet reported revenue for specific companies. Neither of Dr. Voetmann's criticisms indicates that my results are unreliable.
5. **Dr. Voetmann's claim that there is no connection between stock price movements and Capital One's transaction data does not justify his conclusion that the Capital One transaction data is not material.** Dr. Voetmann purports to show through his own analysis that stock returns on earnings announcement dates are unrelated to Capital One's transaction data. However, Dr. Voetmann has not considered other types of evidence that might indicate whether or not investors consider company revenue to be important. As a result, Dr. Voetmann cannot conclude that the information was not material.

#### **IV. Facts and Data Considered**

6. Appendix 1 provides a list of additional data I considered in creating this rebuttal report.

**V. Analyst Reports, News Headlines, and Company Press Releases Indicate that Company Revenues Are Important Information for Investors**

7. Dr. Voetmann incorrectly states that my analysis “rests on the assumption that only revenue data is material to a reasonable investor.” (Voetmann Report ¶ 7a, emphasis added.) He also asserts that earnings are “One of the most important factors for a reasonable investor to consider.” (Voetmann Report ¶ 11 *et seq.*) I do not dispute that company earnings and cash flows are also important information for investors. Contrary to Dr. Voetmann’s statement, I have not claimed that investors rely only or mostly on companies’ reported revenues in making their decisions to buy or sell securities. Instead, I conclude that company sales are important information to investors -- part of the “total mix of available information.”
8. Dr. Voetmann makes the statement that “it is highly unlikely in my opinion that the sales transaction data obtained by the Defendants was material to a reasonable investor.” However, he provides no support for his argument that the advance information about company revenues, obtained from Capital One transactions, was irrelevant to investors. In response to Dr. Voetmann’s claim, I have examined analyst reports, company press releases of earnings information, and news headlines for indications of the relative importance of company revenue information. I have conducted this analysis for the randomly selected sample of 20 firms that were identified in my prior report in this matter. I find that 100% of the company press releases of earnings information sampled discuss company revenue. I find that 98% of the analyst reports sampled mention company revenue. I also find, for these randomly selected firms, that there were over 3,000 news headlines that included the company name and either “revenue” or “sales”

between February 2012 and December 2014. This evidence from the authors of these publications (company management, equity analysts, and journalists) supports my conclusion that investors consider company revenue information to be important, even when investors are provided information about earnings.

**A. Analysts Reports Indicate the Importance of Sales to Investor Decisions**

9. I view the content of equity analyst reports as an indication of the information that the analyst believes is interesting and important for investors. As an objective measure of analysts' view of the importance of revenue information, I collected analyst reports for each of 20 randomly selected companies. I described the sample of 20 randomly selected companies in my previous report. I obtained the analyst reports for the time period January 1-31 2015 from ThomsonOne.com, a well-known source for equity analyst reports.<sup>1</sup>
10. I summarize the results of my review in the table below. I found that 152 of the 156 analyst reports (97%) mention revenues or sales on the first page. In addition, I found that 153 of the 156 analyst reports (98%) mention revenue or sales. These results suggest that investors are interested in revenue information, even when concurrent earnings information is available.

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<sup>1</sup> For four firms, there were no reports in January 2015: ACOM, DTG, RH and SIX. ACOM and DTG were taken over, so there were no analyst reports for these companies in January 2015. As a result, I obtained reports from the most recent month with analyst reports (Oct 2012 and Nov 2012, respectively). For RH and SIX, I obtained all the analyst reports from the most recent month with analyst reports (Dec 2014 and Nov 2014, respectively). I applied three filters in collecting the analyst reports. First, I excluded non-brokerage firm reports. Second, I included only the most recent analyst report for each brokerage firm, to avoid potential duplicate information. As a result, for any of the 20 companies, each brokerage firm is included only once. Finally, I excluded sector reports because they frequently provide only a single paragraph for each company, and the "first page" of a sector report is not the same as the "first page" of a typical analyst report.

**Brokerage Firm Analyst Reports that Mention Revenue or Sales**  
**January 1-31, 2015**

<b>Symbol</b>	<b>Number of</b>	<b>Reports with</b>	<b>% with revenue</b>	<b>% with</b>
	<b>analyst</b>	<b>revenue mention</b>	<b>revenue mention</b>	<b>revenue</b>
AAP	5	5	5	100%
ACOM	8	6	6	75%
BEBE	1	1	1	100%
BIG	6	6	6	100%
BWLD	3	3	3	100%
COH	22	22	22	100%
DTG	3	1	2	33%
FB	32	32	32	100%
GES	4	4	4	100%
GMAN	2	2	2	100%
GNC	2	2	2	100%
M	11	11	11	100%
PETS	4	4	4	100%
PLCE	8	8	8	100%
RH	8	8	8	100%
SBUX	17	17	17	100%
SCVL	1	1	1	100%
SIX	1	1	1	100%
TXRH	2	2	2	100%
URBN	16	16	16	100%
	156	152	153	97%
				98%

**Notes:**

Includes only the most recent analyst report per brokerage firm, to avoid duplicates.

Does not include 17 sector reports, because the "first page" of a sector report is different from the "first page" of a single company analyst report.

For four firms, there were no reports in January 2015: ACOM and DTG were taken over, so the reports are from the most recent month with analyst reports (Oct 2012 and Nov 2012, respectively). Also Six Flags had no analyst reports in Jan. 2015 or Dec. 2014, so the reports are from Nov 2012, and RH had no analyst reports in Jan 2015, so the reports are from Dec 2014.

**B. News Headlines Indicate the Importance of Sales to Investor Decisions**

11. In addition to collecting and reviewing analyst reports, I collected and reviewed news headlines as an indication of information that is of interest to investors. I conducted this search using Factiva, a well-known online provider of access to news information. I collected company news articles that included either “revenue” or “sales” in the headline. To reduce the incidence of non-relevant headlines, I further restricted the search to include only articles with the company name in the headline.
12. After applying these filters, I found, for the random sample of 20 companies, there were 3,007 headlines including the company name and either “revenue” or “sales” between 2/1/12 and 12/31/14. I interpret these headlines as an indication that the public is interested in revenue information for these companies. The table below provides both the count of headlines for each company during this time period, and a sample of one of the more recent headlines.

**News Headlines for Company Including Either "Revenue" or "Sales"**  
**February 1, 2012 through Dec 31, 2014**

Symbol	Number of Headlines	Recent Headline Example
AAP	44	Advance Auto Parts' Profit, Sales Rebound
ACOM	0	
BEBE	72	bebe store gives Q2 2015 comparable store sales guidance; gives Q2 2015 EPS guidance
BIG	67	Big Lots on track for sales milestone not reached in 8 years
BWLD	39	Buffalo Wild Wings Profit, Revenue Top Expectations
COH	157	Rocky start for Coach's comeback; Move to pricier merchandise hurts both sales and shares
DTG	6	Dollar Thrifty 3Q Profit Down 17% on Merger-Related Charges, Lower Vehicle Sales Gains
FB	1,420	Instagram now worth \$35 billion, analyst says; Instagram could contribute \$2 billion in revenue to Facebook
GES	32	Net revenue down 41.3 per cent at Guess in Q3
GMAN	20	Gordmans Stores Inc gives Q4 2014 comparable store sales outlook; revenue and EPS below analysts' estimates
GNC	14	GNC Holdings reports Q3 retail segment revenue down 1.4% to \$480.7M
M	410	J.C. Penney and Macy's Post Lackluster Sales Before Holidays
PETS	15	PetMed Express Profit Slips 1.7%; Severe Winter Weather Dented Fourth-Quarter Sales
PLCE	17	Children's Place Q3 Adj. Profit Tops View, But Sales Miss; Backs 2014 Outlook
RH	32	Restoration Hardware falls as company lowers FY14 revenue view
SBUX	418	Starbucks sees big Christmas Eve sales in the cards
SCVL	34	Boot sales boost Shoe Carnival earnings
SIX	48	Six Flags Entertainment sees record revenue growth in 3rd quarter
TXRH	20	Texas Roadhouse posts double-digit revenue growth, but cost of goods cuts into profit margin
URBN	142	Urban Outfitters Rebounds as 4Q Sales In-Line
	3,007	

**Source:**

Article headlines were obtained from Factiva, using search terms "revenue" or "sales" and the company name to appear in the headline. In addition, a news filter was applied to restrict the articles to company-specific news items.

**C. Company Press Releases Indicate the Importance of Sales to Investors**

13. Publicly listed companies generally issue press releases with quarterly updates of financial information, providing highlights of the company financial results for the previous fiscal quarter.
14. Dr. Voetmann suggests that investors are only interested in a company's earnings and cash flows. However, companies do generally provide revenue information in the context of their quarterly press release summaries of financial results for the preceding quarter, suggesting that investors do care about revenue information.
15. I looked at a sample of company press releases to determine whether these companies provided revenue information in addition to information about earnings. To collect this

information I obtained press releases from Edgar for each of the 20 randomly selected companies.<sup>2</sup> The results of my search, described in the table below, shows that 100% of these companies disclose revenue in their press releases. I interpret this finding as evidence that companies believe that investors are interested in revenue information, even when earnings information is concurrently available.

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<sup>2</sup> Edgar is an online database provided by the SEC, which makes company disclosures available to investors. I selected the most recent 8-K filing before January 1, 2015, that included an Item 2.02: Results of Operations and Financial Condition. For PETS, I obtained the press release from a filing that included Item 9.01: Financial Statements and Exhibits, instead of Item 2.02.

**Recent Company Press Releases**  
**Issued Prior to December 31, 2014**

<b>Symbol</b>	<b>Date of Press Release</b>	<b>Quote with "Sales" or "Revenue"</b>
AAP	<b>11/6/2014</b>	Third Quarter 2014 Highlights: Total sales for the third quarter increased 50.6% to \$2.29 billion, as compared with total sales during the third quarter of fiscal 2013 of \$1.52 billion.
ACOM	<b>10/24/2012</b>	Third Quarter 2012 Financial Highlights: Total revenue for the third quarter of 2012 was \$128.4 million, an increase of 24% over \$103.1 million in the third quarter of 2011.
BEBE	<b>11/6/2014</b>	For the first quarter of fiscal 2015: Net sales from continuing operations were \$102.2 million, a decrease of 6.5% from \$109.3 million in the first quarter of fiscal 2014, primarily as a result of store closures.
BIG	<b>12/5/2014</b>	Net sales from continuing operations for the third quarter of fiscal 2014 increased 0.2% to \$1,107.1 million, compared to net sales from continuing U.S. operations of \$1,104.9 million for the same period of fiscal 2013.
BWLD	<b>10/27/2014</b>	Highlights for the third quarter versus the same period a year ago were: Total revenue increased 18.3% to \$373.5 million
COH	<b>10/28/2014</b>	Coach, Inc. (NYSE:COH, SEHK:6388), a leading New York design house of modern luxury accessories and lifestyle collections, today reported sales of \$1.04 billion for its first fiscal quarter ended September 27, 2014, compared with \$1.15 billion reported in the same period of the prior year, a decrease of 10%.
DTG	<b>11/1/2012</b>	For the quarter ended September 30, 2012, the Company's vehicle rental revenue was \$442.3 million, compared to \$435.6 million in the third quarter of 2011. Monthly revenue per unit was \$1,235 in the third quarter of 2012 compared to \$1,289 for the same period last year.
FB	<b>10/28/2014</b>	Third Quarter 2014 Financial Highlights: Revenue – Revenue for the third quarter of 2014 totaled \$3.20 billion, an increase of 59%, compared with \$2.02 billion in the third quarter of 2013. Excluding the impact of year-over-year changes in foreign exchange rates, revenue would have increased by 58%.
GES	<b>12/3/2014</b>	Q3 Fiscal 2015 Revenues Decreased 4% to \$590 Million; Decreased 3% in Constant Currency
GMAN	<b>11/21/2014</b>	Nine Month Highlights: Net sales increased 2.7% to \$430.7 million compared to \$419.5 million in the nine months ended November 2, 2013.
GNC	<b>10/30/2014</b>	Third Quarter Performance: For the third quarter of 2014, the Company reported consolidated revenue of \$656.3 million, a decrease of 2.7% as compared with consolidated revenue of \$674.5 million for the third quarter of 2013.
M	<b>11/12/2014</b>	Sales: Comparable sales together with comparable sales of departments licensed to third parties were down 0.7 percent in the third quarter of 2014 over 2013. Third quarter comparable sales exclusive of licensed businesses were down 1.4 percent in 2014 compared with 2013. Total sales in the third quarter of 2014 were \$6.195 billion, down 1.3 percent from total sales of \$6.276 billion in the third quarter of 2013.
PETS	<b>10/20/2014</b>	Net sales for the quarter ended September 30, 2014 were \$57.6 million, compared to \$60.5 million for the quarter ended September 30, 2013, a decrease of 4.8%.
PLCE	<b>11/20/2014</b>	Third Quarter 2014 Results: Net sales were \$487.3 million in the third quarter of 2014. The quarter included the negative impact of approximately \$3.9 million from currency exchange rate fluctuations. This compares to net sales of \$492.7 million for the third quarter of 2013.
RH	<b>12/10/2014</b>	Third Quarter Highlights: Net revenues increased 22% on top of a 39% increase last year; Comparable brand revenues increased 22% on top of a 38% increase last year
SBUX	<b>10/30/2014</b>	Q4 Fiscal 2014 Highlights: Consolidated net revenues increased 10% to a Q4 record \$4.2 billion; Global comparable store sales increased 5%, the 19th consecutive quarter of comp growth of 5% or greater
SCVL	<b>12/1/2014</b>	Third Quarter Highlights: Net sales increased \$18.9 million to \$254.7 million, as compared to net sales reported for the third quarter of fiscal 2013, exceeding the Company's guidance
SIX	<b>10/21/2014</b>	Six Flags Entertainment Corporation (NYSE: SIX), the world's largest regional theme park company, today announced its third quarter 2014 revenue grew to a record high of \$542 million, representing a \$37 million or 7 percent increase over the same period in 2013.
TXRH	<b>11/3/2014</b>	Kent Taylor, Chief Executive Officer of Texas Roadhouse, Inc., commented, "We are pleased to report another quarter of strong top-line growth highlighted by solid traffic growth of 4.4%."
URBN	<b>11/17/2014</b>	Total Company net sales for the third quarter of fiscal 2015 increased to a record \$814 million or 5% over the same quarter last year. Comparable Retail segment net sales, which include our comparable direct-to-consumer channel, decreased 1%.

**Source:**

Press releases were obtained from Edgar by selecting the most recent 8-K before January 1, 2015, that includes an Item 2.02: Results of Operations and Financial Condition. For PETS, the press release was attached to a filing that included Item 9.01: Financial Statements and Exhibits, instead of Item 2.02.

## VI. Capital One Transaction Data is Predictive of Company Sales

16. Dr. Voetmann incorrectly asserts that I concluded that Capital One transactions data for a specific company caused a specific company's total revenue. Nowhere in my report do I claim that Capital One transactions data "causes" company revenues. Such a claim would be absurd: the transactions from Capital One credit card users do not "cause" other individuals and entities to make purchases. On the contrary, I claim that based on my analysis the transactions from Capital One credit card users are "predictive" of company revenues.

17. As I stated in Section IV of my report, the Capital One credit card transaction data that the Defendants obtained from Teradata are *predictive* of company reported sales for two reasons. First, the Capital One transactions are a *component* of a company's quarterly sales—as are the purchases made with other companies' credit cards, with store-issued card cards, and with cash—and the transactions data are strongly correlated with the company's reported sales. Second, the Capital One transactions data were available to the Defendants on average about 30 days *prior to* release of companies' reported revenues. In other words, the Capital One transaction data can be considered a leading indicator of company reported sales.

18. It is well established in the literature on prediction and forecasting that, "You do not need to know a causal relationship to make a good forecast."<sup>3</sup> My analysis of correlation addresses the question of whether the quarterly Capital One credit card transactions data, which are a subset of the total population of quarterly transactions at each company, are a

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<sup>3</sup> Stock, J., and M. Watson, *Introduction to Econometrics*, 2<sup>nd</sup> edition, 2007, NY: Addison-Wesley, page 9.

reasonable representation of the total population.<sup>4</sup> Since I find a strong correlation between company revenues and Capital One transactions data, and since the Capital One data is available 30 days prior to the public disclosure of company revenues, there is solid evidence to support my conclusion that Capital One transaction data provided Defendants an excellent predictor of company revenues.

19. In addition, Dr. Voetmann has provided Exhibits 1-5 that purport to show an absence of correlation between abnormal returns and company revenue, the “Voetmann Correlations.” Dr. Voetmann’s analysis ignores the effects of confounding information that is often released concurrently with revenues, without any justification or explanation. This failure undermines any conclusion that may be drawn from the Voetmann Correlations.

## **VII. Dr. Voetmann’s Criticisms of My Regressions are Unfounded**

20. Dr. Voetmann’s arguments that my regression analysis is “unreliable at best, misleading at worst” (Voetmann Report ¶ 31) do not stand up to scrutiny, and are contradicted by his own work.

21. Dr. Voetmann does not dispute my interpretation of the regression results showing that the transaction data are predictive of company sales, even after controlling for analyst expectations (paragraphs 72-77 of my report). Furthermore, in Dr. Voetmann’s Exhibit

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<sup>4</sup> Defendants claim that the Capital One data is immaterial because “purchases made using Capital One credit cards constituted a small percentage of all sales made at each of the Consumer Retail Corporations, and an even smaller percentage of total sales when taking into account other forms of payment.” Defendant Bonan Huang’s Supplemental Answers to Second Set of Interrogatories and Defendant Nan Huang’s Supplemental Answers to Second Set of Interrogatories.

16, he confirms my regression results were correct, using transactions and reported sales data for a sample of 50 companies of his own choosing. (Voetmann Report ¶ 36 (“These regression results are qualitatively the same as Mr. Graham.”)).

#### **A. Stock Returns**

22. Dr. Voetmann claims that my results, which show that the Capital One transaction data is predictive of a company’s reported revenue, “do not have any implications for the materiality of the transaction data” because I do not analyze the relationship between the Capital One transaction data and abnormal stock returns. (Voetmann Report ¶ 31a.) Dr. Voetmann implies that analyzing stock returns data is required to support a conclusion that information would have been important and relevant for an investor.

23. However, Dr. Voetmann fails to consider that investors may consider information to be important and relevant, regardless of whether one can prove it is a statistically significant predictor of abnormal returns. For instance, a company might release critical positive information regarding the clinical success of a new drug, but simultaneously disclose that the company founder or CEO is critically ill. If the stock price falls in response to this news, an economist should not conclude that the clinical success was irrelevant for investors.

24. In this case, I observe that companies typically release a lot of value-relevant information, including earnings, simultaneously with revenue information. As a result, Dr. Voetmann should expect that the company’s stock price reaction to the disclosure of its financials will reflect a mix of the company’s earnings news, as well as its revenue

information, as well as any other value-relevant information released at the same time.<sup>5</sup>

Because Dr. Voetmann has failed (or not attempted) to isolate the stock price reaction to the revenue component of the disclosure, his results do not establish that revenue information is unimportant for investors.

## B. Fixed Effects

25. Dr. Voetmann criticizes my regression analysis for omitting “time or fixed effects.”

(Voetmann Report ¶ 31b.) He claims that including “time or fixed effects” is “standard.” The cited paper (Beaver, 2008), however, does not support his claim that using time or fixed effects is standard.<sup>6</sup> I cannot find support in the paper by Beaver et al. for Dr. Voetmann’s claim that my analysis is “highly unreliable” because it has failed to implement “time or fixed effects.” Indeed, contrary to his criticism, Dr. Voetmann has previously analyzed abnormal returns across companies without the use of time or company specific fixed effects.<sup>7</sup>

26. Despite the lack of support for Dr. Voetmann’s criticism, I conducted a test to determine if including “time or fixed effects” would have changed my conclusions. The results of this test are provided below and are very similar to the results provided in my earlier report. Any changes in my results due to the inclusion of “time or fixed effects” do not

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<sup>5</sup> As Dr. Voetmann has explained in his expert report, “earnings and cash flows are a much more direct value driver compared to revenues.” (Voetmann Report ¶ 12.)

<sup>6</sup> Furthermore, the analysis in the paper by Beaver et al. is unrelated to my analysis. In fact, the authors explain that their analysis has important implications for legal disputes related to financial reporting, in circumstances where “a central issue is how much the stock price would have been affected if the company had released its ‘correct’ earnings in place of allegedly inflated earnings.” (page 709) It should be obvious that my analysis is not intended to shed light on false company disclosures, since the allegations in this case do not include false company disclosures.

<sup>7</sup> Benninga, Simon, and T. Voetmann, “Event Studies”, Chapter in *Financial Modeling*, 2014, 4<sup>th</sup> edition.

affect my conclusions from this analysis. The new results, provided below, indicate that the Capital One data has statistically significant explanatory power regarding revenue surprises.

<b>Forecasting Reported Quarterly Sales Growth</b> <b>for Tainted Companies, Including Company Fixed Effects and Time Fixed Effects</b> <b>Dependent Variable: Reported Sales<sub>q,t</sub> / Reported Sales<sub>q,t-1</sub></b>				
	All Companies		Companies with Statistically Significant Correlation of Transactions to Sales	
	All Announcements	Traded Announcements	All Announcements	Traded Announcements
	(-4.51)	(-1.26)	(-4.15)	(-2.10)
Intercept	-0.122 (-4.51)	-0.121 (-1.26)	-0.120 (-4.15)	-0.069 (-2.10)
Analyst Expectations	0.998 (48.10)	0.980 (35.69)	0.985 (39.50)	0.930 (33.32)
Growth in Capital One Transactions	0.094 (6.81)	0.089 (3.40)	0.108 (6.68)	0.118 (3.77)
Company Fixed Effects	Yes	Yes	Yes	Yes
Year-Month Fixed Effects	Yes	Yes	Yes	Yes
Number of observations	1,714	380	1,481	325
Adjusted R-squared	0.95	0.97	0.94	0.97

Note: Each observation is a company-quarter, where the quarterly value is measured relative to the value in the same quarter of the previous year. Growth in Capital One Transactions is measured as Transactions<sub>q,t</sub> / Transactions<sub>q,t-1</sub>. Analyst Expectations<sub>q,t</sub> are measured relative to Reported Sales<sub>q,t-1</sub>. T-statistics are in parentheses and are based on heteroskedasticity-robust (or White) standard errors. Regressions include company fixed effects and time fixed effects, at the year-month level.

### C. Market, Industry, and Company-Specific Factors

27. Dr. Voetmann criticizes my regression analysis for failing to control for differences in company size and cost structure, and consumer demographics. (Voetmann Report ¶ 31c.) As demonstrated in the table above, controlling for differences across companies shows that these issues do not affect the results or conclusions from my previous report in this matter. As a result, I conclude that Dr. Voetmann's criticism is without merit.

#### **D. Abnormal Returns**

28. Dr. Voetmann argues that I have made a “major methodological error” because I have conducted a statistical analysis of the predictive value of Capital One transactions data for company revenues rather than for abnormal company revenues. (Voetmann Report ¶ 37, 38.) He changes my statistical model by substituting abnormal returns for company revenues but does not explain the structure of his statistical analysis, nor why he views abnormal returns as a reasonable substitute for company revenues. His analysis fails to demonstrate that my regression analysis is flawed.

#### **VIII. Dr. Voetmann Observes “Issues” in the Defendants’ Data Downloads and Manipulations that are Irrelevant to My Analysis**

29. In Section VIII of his report, Dr. Voetmann notes “several major issues” with the data contained in the Defendants’ DONE files that he implies undermine the credibility of my analysis. (Voetmann Report ¶ 33.) He concludes that there are only 50 “companies with reliable revenue data in the DONE files, after accounting for the data issues described above.” (Voetmann Report ¶ 33d.) These conclusions are baseless.

30. First, he states that within some DONE files, the historical company revenue data included by the Defendants for a given company did not match the company’s actual reported revenues from a third-party source (Voetmann Report ¶ 33a, b) citing Target and TJX as examples. However, as described in paragraph 51 of my earlier report, I extracted only the transactions data downloaded by the Defendants from the DONE files. I used I/B/E/S, a well-known database used in academic and industry analyses, as my source for company reported revenues. In addition, there were instances where there was duplicate transaction information in one tab of the DONE file. I did not rely on the duplicate

transaction information. If the file also contained non-duplicate information, I used the non-duplicate information. Otherwise, I excluded the file from my analysis.

31. The second “major issue” raised by Dr. Voetmann (Voetmann Report ¶ 33c) is that in some DONE files, the Defendants’ formula using composite capture rates to construct revenues forecasts did not reconcile to the example from the Walmart DONE file I provided in my Exhibit D. He provides a single example in his Exhibit 14. Dr. Voetmann does not challenge my explanation of the Defendants’ Walmart revenue forecast in Exhibit D. Rather, his major “issue” is that the Defendants did not construct the forecast the same way from one DONE file to another. But my analysis does not attempt to provide a replication of the Defendants’ analysis, which varied over time and across companies. Instead, I performed my own analysis to show that the Capital One transactions data that defendants obtained was highly correlated with publicly reported company revenues.
32. However, the forecast of revenues as performed by the Defendants *does not contribute in any way* to my correlation or regression analyses. My analyses rely on the Capital One transactions data (aggregated to the fiscal quarter) obtained from the Defendants’ files, and the actual company reported sales data obtained from I/B/E/S, not on the Defendants’ forecasts. Therefore, Dr. Voetmann’s assertion that my “analyses based upon the Defendants’ revenues forecasts are potentially incorrect” (Voetmann Report ¶ 33c) reveals only his misreading of my report.

## IX. Counts of Defendants' SQL Queries to Teradata

33. In paragraphs 23 and 24 of my previous report, I presented counts of SQL queries submitted by the Defendants to the Capital One transactions database as recorded by “SQL history” files provided by Capital One. I am revising and refining the count of SQL submissions by limiting the count to queries that mentioned a merchant name, such as “where merch\_nm in (%walmart%).” This eliminates SQL queries to the transactions data base that were not company specific.

34. Here are paragraphs 23 and 24 with the revised counts:

23. I combined the Access data files and searched the text of each SQL query to identify those queries that referenced the “pcdw.t2\_posted\_trxn” transaction database. I found that over the period February 1, 2012 through January 9, 2015, the Defendants completed 13,270 queries to the transaction database; that averages to 368 per month. Bonan Huang submitted 9,480 completed queries (an average of 263 per month) and Nan Huang submitted 3,790 completed queries (an average of 105 per month).

24. One SQL program may extract transaction data for multiple companies, simply by expanding the list of merchant names in the selection rules. Indeed, in my review of the Defendants’ SQL programs, it was very common to see many company names specified in one program. For example, in the month of September, 2013 the Defendants submitted 33 programs that extracted transaction data for 50 or more companies at once. In subsequent months there were fewer such large programs submitted, but the number of companies per program

increased, going from 149 companies in September, 2013 to 176 companies per large program in October 2014.

Signature

A handwritten signature in black ink, appearing to read "Stephen Graham".

Stephen Graham

October 16, 2015

## **Appendix 1: Additional Facts and Data Considered**

### **Publications**

Beaver, William, Bradford Cornell, Wayne Landsman, and Stephen Stubben, "The Impact of Analysts' Forecast Errors and Forecast Revisions on Stock Prices," *Journal of Business Finance & Accounting*, Vol. 35 (June/July 2008) pp. 709-740.

Benninga, Simon, and Torben Voetmann, "Event Studies," Chapter in *Financial Modeling*, 2014, 4<sup>th</sup> Edition.

Stock, J., and M. Watson, Introduction to Econometrics, 2<sup>nd</sup> edition, 2007, NY: Addison-Wesley.

### **Data Sources**

Company press releases from Edgar (available through [www.sec.gov](http://www.sec.gov))

News articles from Factiva

Analyst reports obtained from ThomsonOne

### **Case Materials**

Expert rebuttal report of Torben Voetmann, October 9, 2015

In addition to the materials listed above, I have considered all the documents and materials listed in my previous report in this matter.

**CERTIFICATE OF SERVICE**

I hereby certify, this sixteenth day of October, 2015, that I served a true and correct copy of the foregoing by e-mail upon the following counsel:

Eugene Ingoglia, Esq.  
Morvillo LLP  
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*(Counsel for Defendants Bonan Huang and Nan Huang)*

/s/ Christopher R. Kelly  
Christopher R. Kelly

**Exhibit 3: Defendants' Trades Preceded by Query to Teradata**

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	KSS	2/23/2012
Bonan Huang	JCP	2/24/2012
Bonan Huang	AEO	3/7/2012
Bonan Huang	EXPR	3/7/2012
Bonan Huang	WSM	3/8/2012
Bonan Huang	CMRG	3/15/2012
Bonan Huang	DG	3/22/2012
Bonan Huang	SHW	4/19/2012
Bonan Huang	NFLX	4/23/2012
Bonan Huang	COH	4/24/2012
Bonan Huang	ANGI	4/26/2012
Bonan Huang	JCP	5/15/2012
Bonan Huang	ANF	5/16/2012
Bonan Huang	RL	5/22/2012
Bonan Huang	VRA	5/31/2012
Bonan Huang	DG	6/4/2012
Bonan Huang	KR	6/14/2012
Bonan Huang	PIR	6/14/2012
Bonan Huang	CMG	7/19/2012
Bonan Huang	SHW	7/19/2012
Bonan Huang	VZ	7/19/2012
Bonan Huang	MCD	7/23/2012
Bonan Huang	AAPL	7/24/2012
Bonan Huang	NFLX	7/24/2012
Bonan Huang	TPX	7/24/2012
Bonan Huang	CAKE	7/25/2012
Bonan Huang	STMP	7/25/2012
Bonan Huang	AMZN	7/26/2012
Bonan Huang	DNKN	7/26/2012
Bonan Huang	FB	7/26/2012
Bonan Huang	SBUX	7/26/2012
Bonan Huang	COH	7/31/2012
Bonan Huang	WTW	8/1/2012
Bonan Huang	FOSL	8/7/2012
Bonan Huang	PCLN	8/7/2012
Bonan Huang	AAP	8/9/2012
Bonan Huang	JCP	8/10/2012
Bonan Huang	HD	8/14/2012

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	KORS	8/14/2012
Bonan Huang	PLCE	8/16/2012
Bonan Huang	SMRT	8/16/2012
Bonan Huang	BBY	8/21/2012
Bonan Huang	LZB	8/21/2012
Bonan Huang	WSM	8/21/2012
Bonan Huang	GES	8/22/2012
Bonan Huang	BIG	8/23/2012
Bonan Huang	CRM	8/23/2012
Bonan Huang	TFM	8/29/2012
Bonan Huang	VRA	8/29/2012
Bonan Huang	ZUMZ	8/30/2012
Bonan Huang	FRAN	9/4/2012
Bonan Huang	DG	9/5/2012
Bonan Huang	ULTA	9/6/2012
Bonan Huang	LULU	9/7/2012
Bonan Huang	CASY	9/10/2012
Bonan Huang	PIR	9/13/2012
Bonan Huang	AZO	9/19/2012
Bonan Huang	FINL	9/28/2012
Bonan Huang	DPZ	10/16/2012
Bonan Huang	CMG	10/18/2012
Bonan Huang	MCD	10/19/2012
Bonan Huang	COH	10/23/2012
Bonan Huang	FB	10/23/2012
Bonan Huang	NFLX	10/23/2012
Bonan Huang	PNRA	10/23/2012
Bonan Huang	LL	10/24/2012
Bonan Huang	TSCO	10/24/2012
Bonan Huang	AAPL	10/25/2012
Bonan Huang	CAB	10/25/2012
Bonan Huang	CSTR	10/25/2012
Bonan Huang	PCLN	11/1/2012
Bonan Huang	WTW	11/5/2012
Bonan Huang	Z	11/5/2012
Bonan Huang	WFM	11/7/2012
Bonan Huang	JCP	11/9/2012
Bonan Huang	DKS	11/13/2012
Bonan Huang	HD	11/13/2012
Bonan Huang	PLCE	11/15/2012

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	WMT	11/15/2012
Bonan Huang	FL	11/16/2012
Bonan Huang	HIBB	11/16/2012
Bonan Huang	LOW	11/19/2012
Bonan Huang	CHS	11/20/2012
Bonan Huang	SIG	11/20/2012
Bonan Huang	ANN	11/28/2012
Bonan Huang	ARO	11/28/2012
Bonan Huang	GES	11/28/2012
Bonan Huang	JOSB	11/28/2012
Bonan Huang	ULTA	11/29/2012
Bonan Huang	ZUMZ	11/29/2012
Bonan Huang	ASNA	12/5/2012
Bonan Huang	FRAN	12/5/2012
Bonan Huang	MW	12/5/2012
Bonan Huang	VRA	12/5/2012
Bonan Huang	COH	1/23/2013
Bonan Huang	MCD	1/23/2013
Bonan Huang	NFLX	1/23/2013
Bonan Huang	SCSS	1/24/2013
Bonan Huang	TSCO	1/30/2013
Bonan Huang	BEBE	1/31/2013
Bonan Huang	SFLY	2/5/2013
Bonan Huang	RL	2/6/2013
Bonan Huang	LNKD	2/7/2013
Bonan Huang	NILE	2/12/2013
Bonan Huang	WFM	2/13/2013
Bonan Huang	Z	2/13/2013
Bonan Huang	CAB	2/14/2013
Bonan Huang	LZB	2/19/2013
Bonan Huang	CAKE	2/20/2013
Bonan Huang	SIX	2/20/2013
Bonan Huang	HSNI	2/21/2013
Bonan Huang	ANF	2/22/2013
Bonan Huang	LOW	2/25/2013
Bonan Huang	CBRL	2/26/2013
Bonan Huang	HD	2/26/2013
Bonan Huang	PCLN	2/26/2013
Bonan Huang	CRI	2/27/2013
Bonan Huang	DLTR	2/27/2013

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	JCP	2/27/2013
Bonan Huang	CHS	2/28/2013
Bonan Huang	CRM	2/28/2013
Bonan Huang	KSS	2/28/2013
Bonan Huang	VITC	2/28/2013
Bonan Huang	GCO	3/8/2013
Bonan Huang	SSI	3/12/2013
Bonan Huang	VRA	3/13/2013
Bonan Huang	DSW	3/19/2013
Bonan Huang	WSM	3/19/2013
Bonan Huang	GES	3/20/2013
Bonan Huang	TIF	3/22/2013
Bonan Huang	DG	3/25/2013
Bonan Huang	GMAN	3/25/2013
Bonan Huang	PLCE	3/26/2013
Bonan Huang	FIVE	3/27/2013
Bonan Huang	GME	3/28/2013
Bonan Huang	CMG	4/18/2013
Bonan Huang	SIX	4/22/2013
Bonan Huang	COH	4/23/2013
Bonan Huang	ANGI	4/24/2013
Bonan Huang	CAKE	4/24/2013
Bonan Huang	LL	4/24/2013
Bonan Huang	TSCO	4/24/2013
Bonan Huang	CAB	4/25/2013
Bonan Huang	VPRT	4/25/2013
Bonan Huang	SFLY	5/1/2013
Bonan Huang	BODY	5/2/2013
Bonan Huang	CEC	5/2/2013
Bonan Huang	NILE	5/2/2013
Bonan Huang	FOSL	5/7/2013
Bonan Huang	WFM	5/7/2013
Bonan Huang	PCLN	5/9/2013
Bonan Huang	M	5/15/2013
Bonan Huang	WMT	5/16/2013
Bonan Huang	DKS	5/21/2013
Bonan Huang	HD	5/21/2013
Bonan Huang	TJX	5/21/2013
Bonan Huang	AEO	5/22/2013
Bonan Huang	ARO	5/23/2013

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	BONT	5/23/2013
Bonan Huang	GMAN	5/23/2013
Bonan Huang	GME	5/23/2013
Bonan Huang	NWY	5/23/2013
Bonan Huang	PLCE	5/23/2013
Bonan Huang	RL	5/23/2013
Bonan Huang	WSM	5/23/2013
Bonan Huang	ZUMZ	5/23/2013
Bonan Huang	TIF	5/28/2013
Bonan Huang	CHS	5/29/2013
Bonan Huang	KORS	5/29/2013
Bonan Huang	TFM	5/29/2013
Bonan Huang	GES	5/30/2013
Bonan Huang	GCO	5/31/2013
Bonan Huang	CBRL	6/3/2013
Bonan Huang	FRAN	6/5/2013
Bonan Huang	CBK	6/7/2013
Bonan Huang	ULTA	6/11/2013
Bonan Huang	CASY	6/13/2013
Bonan Huang	LZB	6/18/2013
Bonan Huang	DRI	6/21/2013
Bonan Huang	CMG	7/18/2013
Bonan Huang	SHW	7/18/2013
Bonan Huang	SWY	7/18/2013
Bonan Huang	NFLX	7/22/2013
Bonan Huang	SIX	7/22/2013
Bonan Huang	AAPL	7/23/2013
Bonan Huang	LL	7/24/2013
Bonan Huang	TSCO	7/24/2013
Bonan Huang	AMZN	7/25/2013
Bonan Huang	CRI	7/25/2013
Bonan Huang	EXPE	7/25/2013
Bonan Huang	SBUX	7/25/2013
Bonan Huang	TXRH	7/29/2013
Bonan Huang	BGFV	7/30/2013
Bonan Huang	BWLD	7/30/2013
Bonan Huang	COH	7/30/2013
Bonan Huang	WFM	7/31/2013
Bonan Huang	LNKD	8/1/2013
Bonan Huang	NILE	8/1/2013

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	WTW	8/1/2013
Bonan Huang	JMBA	8/5/2013
Bonan Huang	KORS	8/6/2013
Bonan Huang	MED	8/6/2013
Bonan Huang	Z	8/6/2013
Bonan Huang	NGVC	8/7/2013
Bonan Huang	RL	8/7/2013
Bonan Huang	AAP	8/8/2013
Bonan Huang	PCLN	8/8/2013
Bonan Huang	SEAS	8/13/2013
Bonan Huang	DDS	8/14/2013
Bonan Huang	M	8/14/2013
Bonan Huang	JWN	8/15/2013
Bonan Huang	KSS	8/15/2013
Bonan Huang	RRGB	8/15/2013
Bonan Huang	WMT	8/15/2013
Bonan Huang	BBY	8/20/2013
Bonan Huang	HD	8/20/2013
Bonan Huang	TJX	8/20/2013
Bonan Huang	LOW	8/21/2013
Bonan Huang	PETM	8/21/2013
Bonan Huang	SPLS	8/21/2013
Bonan Huang	TGT	8/21/2013
Bonan Huang	ANF	8/22/2013
Bonan Huang	GME	8/22/2013
Bonan Huang	GPS	8/22/2013
Bonan Huang	ROST	8/22/2013
Bonan Huang	DSW	8/27/2013
Bonan Huang	CHS	8/28/2013
Bonan Huang	GES	8/28/2013
Bonan Huang	CRM	8/29/2013
Bonan Huang	PSUN	8/29/2013
Bonan Huang	SIG	8/29/2013
Bonan Huang	DG	9/4/2013
Bonan Huang	FRAN	9/4/2013
Bonan Huang	JOSB	9/5/2013
Bonan Huang	ZUMZ	9/5/2013
Bonan Huang	CBK	9/10/2013
Bonan Huang	RH	9/10/2013
Bonan Huang	MW	9/11/2013

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	KR	9/12/2013
Bonan Huang	LULU	9/12/2013
Bonan Huang	ULTA	9/12/2013
Bonan Huang	CBRL	9/18/2013
Bonan Huang	PIR	9/19/2013
Bonan Huang	ASNA	9/24/2013
Bonan Huang	FINL	9/27/2013
Bonan Huang	FDO	10/9/2013
Bonan Huang	SCSS	10/16/2013
Bonan Huang	CMG	10/17/2013
Bonan Huang	PETS	10/21/2013
Bonan Huang	COH	10/22/2013
Bonan Huang	PNRA	10/22/2013
Bonan Huang	CAKE	10/23/2013
Bonan Huang	LL	10/23/2013
Bonan Huang	ORLY	10/23/2013
Bonan Huang	AMZN	10/24/2013
Bonan Huang	CRI	10/24/2013
Bonan Huang	UA	10/24/2013
Bonan Huang	SHW	10/25/2013
Bonan Huang	AAPL	10/28/2013
Bonan Huang	BWLD	10/29/2013
Bonan Huang	YELP	10/29/2013
Bonan Huang	FB	10/30/2013
Bonan Huang	HGG	10/31/2013
Bonan Huang	NILE	10/31/2013
Bonan Huang	FOSL	11/5/2013
Bonan Huang	KORS	11/5/2013
Bonan Huang	RRGB	11/5/2013
Bonan Huang	VSI	11/5/2013
Bonan Huang	Z	11/5/2013
Bonan Huang	VITC	11/6/2013
Bonan Huang	WFM	11/6/2013
Bonan Huang	GRPN	11/7/2013
Bonan Huang	PCLN	11/7/2013
Bonan Huang	M	11/13/2013
Bonan Huang	JWN	11/14/2013
Bonan Huang	KSS	11/14/2013
Bonan Huang	URBN	11/18/2013
Bonan Huang	BBY	11/19/2013

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	HD	11/19/2013
Bonan Huang	JCP	11/20/2013
Bonan Huang	LOW	11/20/2013
Bonan Huang	WSM	11/20/2013
Bonan Huang	BONT	11/21/2013
Bonan Huang	GME	11/21/2013
Bonan Huang	KIRK	11/21/2013
Bonan Huang	SSI	11/21/2013
Bonan Huang	HIBB	11/22/2013
Bonan Huang	DSW	11/26/2013
Bonan Huang	PLCE	11/26/2013
Bonan Huang	SIG	11/26/2013
Bonan Huang	TLYS	11/26/2013
Bonan Huang	GMAN	12/2/2013
Bonan Huang	KKD	12/2/2013
Bonan Huang	SCVL	12/2/2013
Bonan Huang	ARO	12/4/2013
Bonan Huang	EXPR	12/4/2013
Bonan Huang	GES	12/4/2013
Bonan Huang	MFRM	12/4/2013
Bonan Huang	BIG	12/5/2013
Bonan Huang	DG	12/5/2013
Bonan Huang	ULTA	12/5/2013
Bonan Huang	CASY	12/9/2013
Bonan Huang	AZO	12/10/2013
Bonan Huang	LULU	12/12/2013
Bonan Huang	DRI	12/19/2013
Bonan Huang	PIR	12/19/2013
Bonan Huang	RAD	12/19/2013
Bonan Huang	FINL	12/20/2013
Bonan Huang	RT	1/8/2014
Bonan Huang	FDO	1/9/2014
Bonan Huang	PETS	1/21/2014
Bonan Huang	COH	1/22/2014
Bonan Huang	NFLX	1/22/2014
Bonan Huang	SBUX	1/23/2014
Bonan Huang	FB	1/29/2014
Bonan Huang	VPRT	1/29/2014
Bonan Huang	AMZN	1/30/2014
Bonan Huang	BWLD	2/4/2014

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	KORS	2/4/2014
Bonan Huang	ORLY	2/5/2014
Bonan Huang	YELP	2/5/2014
Bonan Huang	AAP	2/6/2014
Bonan Huang	LNKD	2/6/2014
Bonan Huang	NILE	2/6/2014
Bonan Huang	WFM	2/12/2014
Bonan Huang	CAB	2/13/2014
Bonan Huang	WTW	2/13/2014
Bonan Huang	LZB	2/18/2014
Bonan Huang	LL	2/19/2014
Bonan Huang	GRPN	2/20/2014
Bonan Huang	ZU	2/24/2014
Bonan Huang	BGFV	2/25/2014
Bonan Huang	CBRL	2/25/2014
Bonan Huang	HD	2/25/2014
Bonan Huang	CRI	2/26/2014
Bonan Huang	LOW	2/26/2014
Bonan Huang	NDLS	2/26/2014
Bonan Huang	TJX	2/26/2014
Bonan Huang	CHS	2/27/2014
Bonan Huang	GPS	2/27/2014
Bonan Huang	AZO	3/4/2014
Bonan Huang	JMBA	3/6/2014
Bonan Huang	PLCE	3/6/2014
Bonan Huang	EXPR	3/12/2014
Bonan Huang	ARO	3/13/2014
Bonan Huang	GCO	3/13/2014
Bonan Huang	DSW	3/18/2014
Bonan Huang	PSUN	3/18/2014
Bonan Huang	GES	3/19/2014
Bonan Huang	SCVL	3/20/2014
Bonan Huang	FIVE	3/25/2014
Bonan Huang	FRAN	3/26/2014
Bonan Huang	CONN	3/27/2014
Bonan Huang	LULU	3/27/2014
Bonan Huang	SIG	3/27/2014
Bonan Huang	RT	4/9/2014
Bonan Huang	FDO	4/10/2014
Bonan Huang	CMG	4/17/2014

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	SCSS	4/17/2014
Bonan Huang	NFLX	4/21/2014
Bonan Huang	AAPL	4/23/2014
Bonan Huang	FB	4/23/2014
Bonan Huang	TSCO	4/23/2014
Bonan Huang	SBUX	4/24/2014
Bonan Huang	COH	4/29/2014
Bonan Huang	PNRA	4/29/2014
Bonan Huang	VPRT	4/29/2014
Bonan Huang	LNKD	5/1/2014
Bonan Huang	OUTR	5/1/2014
Bonan Huang	MED	5/5/2014
Bonan Huang	JMBA	5/8/2014
Bonan Huang	PCLN	5/8/2014
Bonan Huang	FOSL	5/13/2014
Bonan Huang	JACK	5/14/2014
Bonan Huang	M	5/14/2014
Bonan Huang	JCP	5/15/2014
Bonan Huang	JWN	5/15/2014
Bonan Huang	TGT	5/21/2014
Bonan Huang	BBY	5/22/2014
Bonan Huang	KIRK	5/22/2014
Bonan Huang	TFM	5/22/2014
Bonan Huang	GMAN	5/28/2014
Bonan Huang	KORS	5/28/2014
Bonan Huang	ANF	5/29/2014
Bonan Huang	GES	5/29/2014
Bonan Huang	BIG	5/30/2014
Bonan Huang	CONN	6/2/2014
Bonan Huang	DG	6/3/2014
Bonan Huang	FIVE	6/4/2014
Bonan Huang	BURL	6/10/2014
Bonan Huang	ULTA	6/10/2014
Bonan Huang	PIR	6/19/2014
Bonan Huang	DRI	6/20/2014
Bonan Huang	BKS	6/25/2014
Bonan Huang	FINL	6/27/2014
Bonan Huang	TCS	7/8/2014
Bonan Huang	FDO	7/10/2014
Bonan Huang	SCSS	7/16/2014

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	CMG	7/21/2014
Bonan Huang	AAPL	7/22/2014
Bonan Huang	ORLY	7/23/2014
Bonan Huang	CRI	7/24/2014
Bonan Huang	SBUX	7/24/2014
Bonan Huang	UA	7/24/2014
Bonan Huang	BGFV	7/29/2014
Bonan Huang	BWLD	7/29/2014
Bonan Huang	GNC	7/29/2014
Bonan Huang	PNRA	7/29/2014
Bonan Huang	RT	7/29/2014
Bonan Huang	VPRT	7/30/2014
Bonan Huang	WTW	7/30/2014
Bonan Huang	OUTR	7/31/2014
Bonan Huang	JMBA	8/4/2014
Bonan Huang	KORS	8/4/2014
Bonan Huang	VSI	8/5/2014
Bonan Huang	EAT	8/7/2014
Bonan Huang	MED	8/7/2014
Bonan Huang	SEAS	8/13/2014
Bonan Huang	BODY	8/14/2014
Bonan Huang	JWN	8/14/2014
Bonan Huang	KSS	8/14/2014
Bonan Huang	URBN	8/18/2014
Bonan Huang	SPLS	8/20/2014
Bonan Huang	PLCE	8/21/2014
Bonan Huang	ROST	8/21/2014
Bonan Huang	TFM	8/21/2014
Bonan Huang	TUES	8/21/2014
Bonan Huang	BBY	8/26/2014
Bonan Huang	DSW	8/26/2014
Bonan Huang	GES	8/27/2014
Bonan Huang	WSM	8/27/2014
Bonan Huang	ANF	8/28/2014
Bonan Huang	CONN	9/2/2014
Bonan Huang	FRAN	9/9/2014
Bonan Huang	MW	9/10/2014
Bonan Huang	VRA	9/10/2014
Bonan Huang	LULU	9/11/2014
Bonan Huang	ULTA	9/11/2014

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	PIR	9/17/2014
Bonan Huang	FINL	9/26/2014
Bonan Huang	NFLX	10/15/2014
Bonan Huang	CMG	10/20/2014
Bonan Huang	LL	10/22/2014
Bonan Huang	SCSS	10/22/2014
Bonan Huang	YELP	10/22/2014
Bonan Huang	CAB	10/23/2014
Bonan Huang	CRI	10/23/2014
Bonan Huang	BWLD	10/27/2014
Bonan Huang	COH	10/28/2014
Bonan Huang	FB	10/28/2014
Bonan Huang	RL	10/29/2014
Bonan Huang	WTW	10/29/2014
Bonan Huang	GNC	10/30/2014
Bonan Huang	LNDK	10/30/2014
Bonan Huang	OUTR	10/30/2014
Bonan Huang	SBUX	10/30/2014
Bonan Huang	NTRI	11/3/2014
Bonan Huang	PCLN	11/4/2014
Bonan Huang	RRGB	11/4/2014
Bonan Huang	VSI	11/4/2014
Bonan Huang	NDLS	11/5/2014
Bonan Huang	AAP	11/6/2014
Bonan Huang	BEBE	11/6/2014
Bonan Huang	M	11/12/2014
Bonan Huang	SEAS	11/12/2014
Bonan Huang	JWN	11/13/2014
Bonan Huang	LZB	11/18/2014
Bonan Huang	LOW	11/19/2014
Bonan Huang	SPLS	11/19/2014
Bonan Huang	SSI	11/19/2014
Bonan Huang	NGVC	11/20/2014
Bonan Huang	DSW	11/25/2014
Bonan Huang	SCVL	12/1/2014
Bonan Huang	ANF	12/3/2014
Bonan Huang	GES	12/3/2014
Bonan Huang	TLYS	12/3/2014
Bonan Huang	ULTA	12/4/2014
Bonan Huang	BIG	12/5/2014

Defendant	Company Trading Symbol	Announcement Date
Bonan Huang	KKD	12/9/2014
Bonan Huang	MW	12/10/2014

Defendant	Company Trading Symbol	Announcement Date
Nan Huang	WMT	2/21/2012
Nan Huang	ANN	3/9/2012
Nan Huang	GME	3/22/2012
Nan Huang	JCP	5/15/2012
Nan Huang	CMG	7/19/2012
Nan Huang	PETS	7/23/2012
Nan Huang	UA	7/24/2012
Nan Huang	FB	7/26/2012
Nan Huang	COH	7/31/2012
Nan Huang	LNKD	8/2/2012
Nan Huang	FOSL	8/7/2012
Nan Huang	PCLN	8/7/2012
Nan Huang	JCP	8/10/2012
Nan Huang	HIBB	8/17/2012
Nan Huang	LZB	8/21/2012
Nan Huang	WSM	8/21/2012
Nan Huang	CRM	8/23/2012
Nan Huang	SCVL	8/23/2012
Nan Huang	JOSB	8/29/2012
Nan Huang	VRA	8/29/2012
Nan Huang	MW	9/5/2012
Nan Huang	ULTA	9/6/2012
Nan Huang	LULU	9/7/2012
Nan Huang	ASNA	9/19/2012
Nan Huang	AZO	9/19/2012
Nan Huang	COH	10/23/2012
Nan Huang	PNRA	10/23/2012
Nan Huang	CAB	10/25/2012
Nan Huang	UA	10/25/2012
Nan Huang	JCP	11/9/2012
Nan Huang	PLCE	11/15/2012
Nan Huang	WMT	11/15/2012
Nan Huang	HIBB	11/16/2012
Nan Huang	AEO	11/28/2012
Nan Huang	ARO	11/28/2012
Nan Huang	COH	1/23/2013
Nan Huang	NFLX	1/23/2013

Defendant	Company Trading Symbol	Announcement Date
Nan Huang	SCSS	1/24/2013
Nan Huang	TSCO	1/30/2013
Nan Huang	VPRT	1/31/2013
Nan Huang	SFLY	2/5/2013
Nan Huang	RL	2/6/2013
Nan Huang	COLM	2/7/2013
Nan Huang	LNUK	2/7/2013
Nan Huang	KORS	2/12/2013
Nan Huang	NILE	2/12/2013
Nan Huang	CAB	2/14/2013
Nan Huang	LL	2/20/2013
Nan Huang	SIX	2/20/2013
Nan Huang	HSNI	2/21/2013
Nan Huang	ANF	2/22/2013
Nan Huang	LOW	2/25/2013
Nan Huang	HD	2/26/2013
Nan Huang	CRI	2/27/2013
Nan Huang	DLTR	2/27/2013
Nan Huang	JCP	2/27/2013
Nan Huang	CRM	2/28/2013
Nan Huang	KSS	2/28/2013
Nan Huang	VITC	2/28/2013
Nan Huang	AEO	3/6/2013
Nan Huang	BIG	3/6/2013
Nan Huang	GCO	3/8/2013
Nan Huang	DKS	3/11/2013
Nan Huang	URBN	3/11/2013
Nan Huang	DSW	3/19/2013
Nan Huang	WSM	3/19/2013
Nan Huang	GES	3/20/2013
Nan Huang	DG	3/25/2013
Nan Huang	GMAN	3/25/2013
Nan Huang	PLCE	3/26/2013
Nan Huang	FIVE	3/27/2013
Nan Huang	SIX	4/22/2013
Nan Huang	COH	4/23/2013
Nan Huang	ANGI	4/24/2013
Nan Huang	LL	4/24/2013
Nan Huang	GNC	4/26/2013
Nan Huang	BODY	5/2/2013

Defendant	Company Trading Symbol	Announcement Date
Nan Huang	FNP	5/2/2013
Nan Huang	MFB	5/8/2013
Nan Huang	WMT	5/16/2013
Nan Huang	RL	5/23/2013
Nan Huang	TIF	5/28/2013
Nan Huang	SCSS	7/17/2013
Nan Huang	CMG	7/18/2013
Nan Huang	SHW	7/18/2013
Nan Huang	NFLX	7/22/2013
Nan Huang	SIX	7/22/2013
Nan Huang	SKX	7/24/2013
Nan Huang	TXRH	7/29/2013
Nan Huang	JMBA	8/5/2013
Nan Huang	KORS	8/6/2013
Nan Huang	RL	8/7/2013
Nan Huang	AAP	8/8/2013
Nan Huang	FNP	8/8/2013
Nan Huang	JWN	8/15/2013
Nan Huang	WMT	8/15/2013
Nan Huang	HD	8/20/2013
Nan Huang	JCP	8/20/2013
Nan Huang	LOW	8/21/2013
Nan Huang	GES	8/28/2013
Nan Huang	GCO	8/29/2013
Nan Huang	SWY	10/10/2013
Nan Huang	SCSS	10/16/2013
Nan Huang	COH	10/22/2013
Nan Huang	PNRA	10/22/2013
Nan Huang	HLF	10/28/2013
Nan Huang	NTRI	10/28/2013
Nan Huang	FOSL	11/5/2013
Nan Huang	M	11/13/2013
Nan Huang	DKS	11/19/2013
Nan Huang	JCP	11/20/2013
Nan Huang	SCVL	12/2/2013
Nan Huang	DG	12/5/2013
Nan Huang	RH	12/12/2013
Nan Huang	PIR	12/19/2013
Nan Huang	FINL	12/20/2013
Nan Huang	COH	1/22/2014

Defendant	Company Trading Symbol	Announcement Date
Nan Huang	NFLX	1/22/2014
Nan Huang	FB	1/29/2014
Nan Huang	LNKD	2/6/2014
Nan Huang	FOSL	2/11/2014
Nan Huang	CAB	2/13/2014
Nan Huang	GNC	2/13/2014
Nan Huang	WTW	2/13/2014
Nan Huang	RRGB	2/14/2014
Nan Huang	PNRA	2/18/2014
Nan Huang	JACK	2/19/2014
Nan Huang	LL	2/19/2014
Nan Huang	CRI	2/26/2014
Nan Huang	GPS	2/27/2014
Nan Huang	PLCE	3/6/2014
Nan Huang	AEO	3/11/2014
Nan Huang	BKE	3/14/2014
Nan Huang	GES	3/19/2014
Nan Huang	FRAN	3/26/2014
Nan Huang	CONN	3/27/2014
Nan Huang	FINL	3/28/2014
Nan Huang	CMG	4/17/2014
Nan Huang	NFLX	4/21/2014
Nan Huang	SBUX	4/24/2014
Nan Huang	COH	4/29/2014
Nan Huang	VPRT	4/29/2014
Nan Huang	NTRI	5/1/2014
Nan Huang	OUTR	5/1/2014
Nan Huang	MED	5/5/2014
Nan Huang	Z	5/7/2014
Nan Huang	RL	5/9/2014
Nan Huang	FOSL	5/13/2014
Nan Huang	JACK	5/14/2014
Nan Huang	RRGB	5/20/2014
Nan Huang	AEO	5/21/2014
Nan Huang	LB	5/21/2014
Nan Huang	TGT	5/21/2014
Nan Huang	BKE	5/22/2014
Nan Huang	TFM	5/22/2014
Nan Huang	DSW	5/28/2014
Nan Huang	GMAN	5/28/2014

Defendant	Company Trading Symbol	Announcement Date
Nan Huang	KORS	5/28/2014
Nan Huang	ANN	5/30/2014
Nan Huang	BIG	5/30/2014
Nan Huang	MFRM	6/3/2014
Nan Huang	VRA	6/5/2014
Nan Huang	FRAN	6/10/2014
Nan Huang	LULU	6/12/2014
Nan Huang	LZB	6/17/2014
Nan Huang	FDO	7/10/2014
Nan Huang	SCSS	7/16/2014
Nan Huang	CMG	7/21/2014
Nan Huang	FB	7/23/2014
Nan Huang	CRI	7/24/2014
Nan Huang	LNKD	7/31/2014
Nan Huang	OUTR	7/31/2014
Nan Huang	KORS	8/4/2014
Nan Huang	NDLS	8/13/2014
Nan Huang	SEAS	8/13/2014
Nan Huang	JWN	8/14/2014
Nan Huang	RRGB	8/14/2014
Nan Huang	URBN	8/18/2014
Nan Huang	DKS	8/19/2014
Nan Huang	HD	8/19/2014
Nan Huang	CTRN	8/20/2014
Nan Huang	LOW	8/20/2014
Nan Huang	BBY	8/26/2014
Nan Huang	DSW	8/26/2014
Nan Huang	GES	8/27/2014
Nan Huang	BIG	8/29/2014
Nan Huang	FRAN	9/9/2014
Nan Huang	KKD	9/9/2014
Nan Huang	ULTA	9/11/2014
Nan Huang	FINL	9/26/2014
Nan Huang	DFRG	10/14/2014
Nan Huang	AAPL	10/20/2014
Nan Huang	CMG	10/20/2014
Nan Huang	PETS	10/20/2014
Nan Huang	LL	10/22/2014
Nan Huang	ORLY	10/22/2014
Nan Huang	BJRI	10/23/2014

Defendant	Company Trading Symbol	Announcement Date
Nan Huang	CRI	10/23/2014
Nan Huang	BWLD	10/27/2014
Nan Huang	EXPE	10/30/2014
Nan Huang	RRGB	11/4/2014
Nan Huang	VSI	11/4/2014
Nan Huang	AEO	12/4/2014
Nan Huang	LULU	12/11/2014

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

SECURITIES AND EXCHANGE  
COMMISSION

Plaintiff,

v.

BONAN HUANG, et al.

Defendants.

Case No. 2:15-cv-00269-MAK

**DECLARATION OF DUSTIN E. RUTA**

I, Dustin E. Ruta, based on my personal knowledge, hereby declare and state:

1. I am over eighteen years of age and competent to make this declaration.

2. I am employed as an Enforcement Staff Accountant in the Philadelphia Regional Office of the United States Securities and Exchange Commission (the "Commission"), the Plaintiff in this matter, located at 1617 JFK Blvd., Suite 520, Philadelphia, Pennsylvania 19103. I have been employed by the Commission for 2 years and 6 months. My official duties include participating in fact-finding inquiries and investigations to determine whether federal securities laws have been, are presently being, or are about to be violated, and assisting in the Commission's litigation of enforcement actions.

3. I received a Bachelor's degree in accounting from Albright College in 2003, a Master's degree in accounting from Villanova University in 2010, and an MBA from Villanova University with a specialization in Finance in 2013. I also am Certified Public Accountant licensed in the Commonwealth of Pennsylvania.

4. I am assigned to the Commission's litigation of this matter. In connection with this assignment, I have, among other things, reviewed documents produced to the Commission in

connection with the investigation and litigation of this matter, publicly available information concerning the companies in which they traded securities, and discovery-related documents. My declaration is based upon my review and analysis of the records referenced above.

5. Attached as Exhibit 1 is a true and correct copy of Dr. Torben Voetmann's Expert Rebuttal Report.

6. Attached as Exhibit 2 is a true and correct copy of Dr. Voetmann's October 16, 2015 deposition in this matter.

7. On January 15, 2014, Cabela's Inc. announced it would publicly release its fourth quarter and full fiscal year 2013 financial results before the market opened on February 13, 2014. Exhibit 3 is a true and correct redacted copy of Cabela's press release.

8. On February 7, 2014 and February 8, 2014, Bonan Huang conducted a search on Capital One's database for credit card sales data for Cabela's. Exhibit 4 is a portion of the spreadsheet Capital One provided to the Commission identifying these searches by Bonan Huang.

9. On February 12, 2014, Nan Huang conducted a search on Capital One's database for credit card sales data for Cabela's. Exhibit 5 is a portion of the spreadsheet Capital One provided to the Commission identifying these searches by Nan Huang.

10. A stock option, commonly referred to as an "option," gives its holder the option to buy or sell shares of an underlying stock at a specified price (the "strike" price) at a later date. Options are generally sold in "contracts," which give the option holder the opportunity to buy or sell 100 shares of an underlying stock. Trading options are generally perceived as a riskier trading tool than directly buying or selling shares of stock because if the option does not go above a strike price (for a call) or below the strike price (for a put) before it expires, the option

has no value. At its most basic, a put option gives the holder the right to sell a specified amount of an underlying stock at the strike price within a specified time. A put option becomes more valuable as the price of the underlying stock declines relative to the strike price. For example, if an investor holds a put option with a strike price of \$10, and the price of the stock falls to \$5, the holder will be able to sell the share of stock for \$10, realizing a \$5 gain, before the expiration date.

11. On February 12, 2014, when Cabela's stock price was approximately \$70 a share, defendant Bonan Huang purchased 19 contracts of put options on Cabela's stock with strike prices ranging from \$65 to \$70 and expiration dates of February 22, 2014, and sold 13 put options on Cabela's stock with a strike price of \$60 and expiration date of February 22, 2014, for a total net cost of \$4,277. Purchasing and selling these put options in this combination meant that Bonan Huang would maximize his profit if Cabela's share price decreased to a range of \$60 to \$65 imminently. Exhibit 6 is the OptionsHouse trading activity reflecting these trades.

12. On February 12, when Cabela's stock price was approximately \$70, defendant Nan Huang purchased 170 contracts of put options on Cabela's stock with strike prices of \$65 and \$70 and expiration dates of February 22, 2014, for \$51,890. Purchasing these put options meant that Nan Huang would profit from a decrease in the share price for Cabela's stock by February 22, 2014. Exhibit 7 is the OptionsHouse trading activity reflecting these trades.

13. Before the market opened on February 13, 2014 Cabela's released its sales and earnings data for the fourth quarter of 2013. Cabela's announced that their same quarter sales decreased approximately 10%, and the share price for Cabela's decreased from \$69.81 to \$64.26, or approximately 8% that day. Exhibit 8 is a true and correct copy of the press release issued by

Cabela's on February 13, 2014. Exhibit 9 is a true and correct copy of daily share price for Cabela's during the relevant time period.

14. On February 13, 2014, Bonan Huang closed his options positions for Cabela's for a profit of \$1,450.05, realizing an approximate 34% return on his one-day investment. See Exhibit 6.

15. On February 13, 2014 (and days shortly thereafter), defendant Nan Huang sold his options for Cabela's for \$107,950 realizing a short-term return of 108% on his investment. See Exhibit 7.

16. On June 16, 2014, Chipotle Mexican Grill, a chain of fast casual restaurants, announced that it would publicly announce its second quarter 2014 financial results after the market closed on July 21, 2014. Exhibit 10 is a true and correct copy of Chipotle's press release.

17. On July 20, 2014, both defendant Bonan Huang and defendant Nan Huang conducted searches on Capital One's database for credit card sales data for Chipotle. Exhibit 11 is a portion of the spreadsheet Capital One provided to the Commission identifying these searches by Bonan Huang and Nan Huang.

18. At its most basic, a call option gives the holder a right to buy a security at the strike price within a specified period. Call options are profitable if the price of the underlying security increases relative to the strike price. For example, if an investor holds a call option with a strike price of \$5, and the price of the stock rises to \$10, the holder will be able to buy the share of stock for \$5, before the expiration date, and then presumably sell the share for a \$5 profit.

19. On July 21, 2014, when Chipotle's stock price was approximately \$589 a share, defendant Bonan Huang purchased 20 contracts of call options on Chipotle's stock with strike prices ranging from \$582.50 to \$627.50 and expiration dates ranging from August 5, 2014 to